

Two new species of the spider genus *Oxyopes* (Araneae: Oxyopidae) from China

Junxia Zhang & Mingsheng Zhu

The College of Life Sciences, Hebei University, Baoding, 071002 China,

E-mail: jxzhang@mail.hbu.edu.cn

Abstract — Two new species of the genus *Oxyopes* collected from Hainan and Yunnan Provinces, China, are illustrated and described under the names of *Oxyopes bicornus* and *O. decorosus*.

Key words — Araneae, Oxyopidae, *Oxyopes*, new species, China.

Oxyopidae, commonly called the lynx spiders, is a small family comprising nine genera and 408 species worldwide (Platnick 2004), of which 35 species of three genera are known from China (Song et al. 1999; Bao & Yin 2002; Yin et al. 2003). Oxyopids are small to large spiders with body length 5–23 mm. Their eight eyes always line in four rows (2–2–2–2), which is distinctive from other spiders. Members of this family are mainly plant dwellers usually found on grass and shrubs.

The genus *Oxyopes* is the largest genus of the family Oxyopidae, and currently contains 284 species with the distribution of all over the world (Platnick 2004). In recent 60 years, some arachnologists, such as Sherriffs (1951, 1955), Brady (1964), Paik (1969) and Levy (1999), etc., redescribed or reported many species of this genus from Oriental Region, America, Korea and Israel. A total of 31 species are known to Chinese fauna (Song et al. 1999; Bao & Yin 2002; Yin et al. 2003).

In the course of examination of the spider specimens recently collected from Hainan and Yunnan Provinces, two species of the genus *Oxyopes* were found to be new to science. This paper deals with the description of the two new species named *Oxyopes bicornus* and *O. decorosus*.

Type series of the new species are deposited in the collection of the Museum of Hebei University, Baoding, China (MHBHU). All measurements given are in mm. Palp measurements are shown as: total length (femur, patella, tibia, tarsus). Leg measurements are shown as: total length (femur, patella and tibia, metatarsus, tarsus).

Abbreviations used are: AME, anterior median eye; ALE, anterior lateral eye; AME-ALE, distance between AME and ALE; AME-AME, distance between AMEs; PME, posterior median eye; PLE, posterior lateral eye; PME-PLE, distance between PME and PLE; PME-PME, distance between PMEs; MOA, median ocular area.

Oxyopes bicornus new species

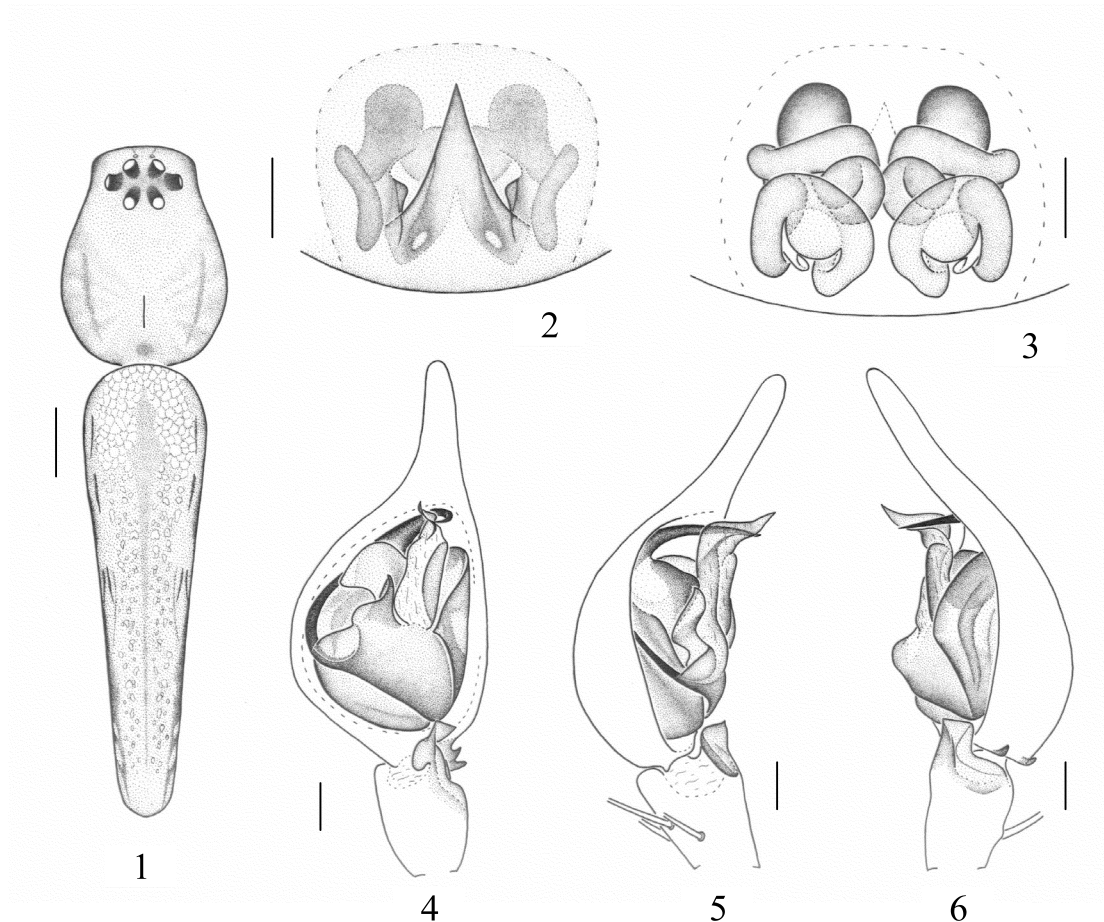
Figs. 1–6

Types. Female holotype (MHBHU-Ar-89) and 1 male paratype (MHBHU-Ar-90) from Mengxing, Mengla County (21°48'N, 101°18'E), Yunnan Province, China, 26 July, 2000, collected by M. S. Zhu and J. X. Zhang.

Etymology. The specific name is from the Latin *bi+corneus*, and refers to the two basal cymbinal processes of male palp.

Diagnosis. The new species can be easily distinguished from other congeners by having two basal cymbinal processes of male palp. It resembles *Oxyopes striagatus* Song 1991 in female epigynum with a median extension (Song 1991: 174, fig. 6), but differs from the latter in having tipped distal end of median extension of epigynum long and coiled copulatory duct, and larger median apophysis.

Female. Holotype. Body length 9.90; cephalothorax 3.38 long, 2.48 wide; abdomen 6.62 long, 1.89 wide. Carapace pyriform and white orange, with a pair of indistinct gray longitudinal bands in front of AMEs which extending to the front face of chelicerae; thoracic part with a pair of red orange longitudinal bands near the lateral sides and a red orange spot behind the fovea. Chelicerae orange, with two promarginal and one retromarginal teeth. Femur of palp with four dorsal spines. Endites, labium, sternum and legs yellow. Legs with many long spines and trichobothria; a pair of short distal spines lacking on ventral side of tibiae. Abdomen long oval; dorsum with many silvery squamae, a mesal gray leaf-like marking, and a few lateral dark streaks; venter grayish, with lateral silvery squamae and a pair of mesal dark longitudinal bands. Eye sizes: AME 0.13, ALE 0.29, PME 0.26, PLE 0.26. AME-AME 0.21, AME-ALE 0.09, PME-PME 0.26, PME-PLE 0.33. First eye row 0.42 wide, second eye row 0.73 wide, third eye row 1.29 wide, fourth eye row 0.73 wide. MOA



Figs. 1–6. *Oxyopes bicorneus* new species: 1–3, Female holotype, 4–6, male paratype. 1, female, dorsal view; 2, epigynum, ventral view; 3, female internal genitalia, dorsal view; 4, palpal organ, ventral view; 5, palpal organ, prolateral view; 6, palpal organ, retrolateral view. (Scales for Fig. 1, 1 mm; for Figs. 2–6, 0.2 mm)

1.07 long, front width 0.42, back width 0.73. Clypeus height 0.74. Labium longer than wide (0.71 : 0.44). Sternum longer than wide (1.58 : 1.36). Measurements of legs: leg I 18.50 (4.95, 6.39, 5.58, 1.58), II 16.88 (4.59, 5.67, 5.22, 1.40), III 13.51 (3.74, 4.41, 4.19, 1.17), IV 14.41 (4.01, 4.59, 4.46, 1.35). Leg formula: 1243. Median extension of epigynum almost triangular in shape, copulatory duct long and coiled, expanding near the basal part; spermatheca round.

Male. Body length 7.83; cephalothorax 3.38 long, 2.61 wide; abdomen 4.50 long, 1.62 wide. Body lacking red orange band on the carapace and silvery squamae on dorsum of abdomen, venter with a wide dark mesal longitudinal band. Other characters similar to those of female. Measurements of palp and legs: palp 4.17 (1.29, 0.48, 0.51, 1.89); leg I 17.92 (4.50, 5.81, 5.49, 2.12), II 15.67 (4.14, 5.09, 4.82, 1.62), III 12.52 (3.47, 3.96, 3.92, 1.17), IV 15.49 (4.19, 4.50, 5.31, 1.49). Leg formula: 1243. Cymbium of palp with two basal processes, median apophysis large, ventral tibial apophysis with a distal triangular lobe.

Oxyopes decorosus new species

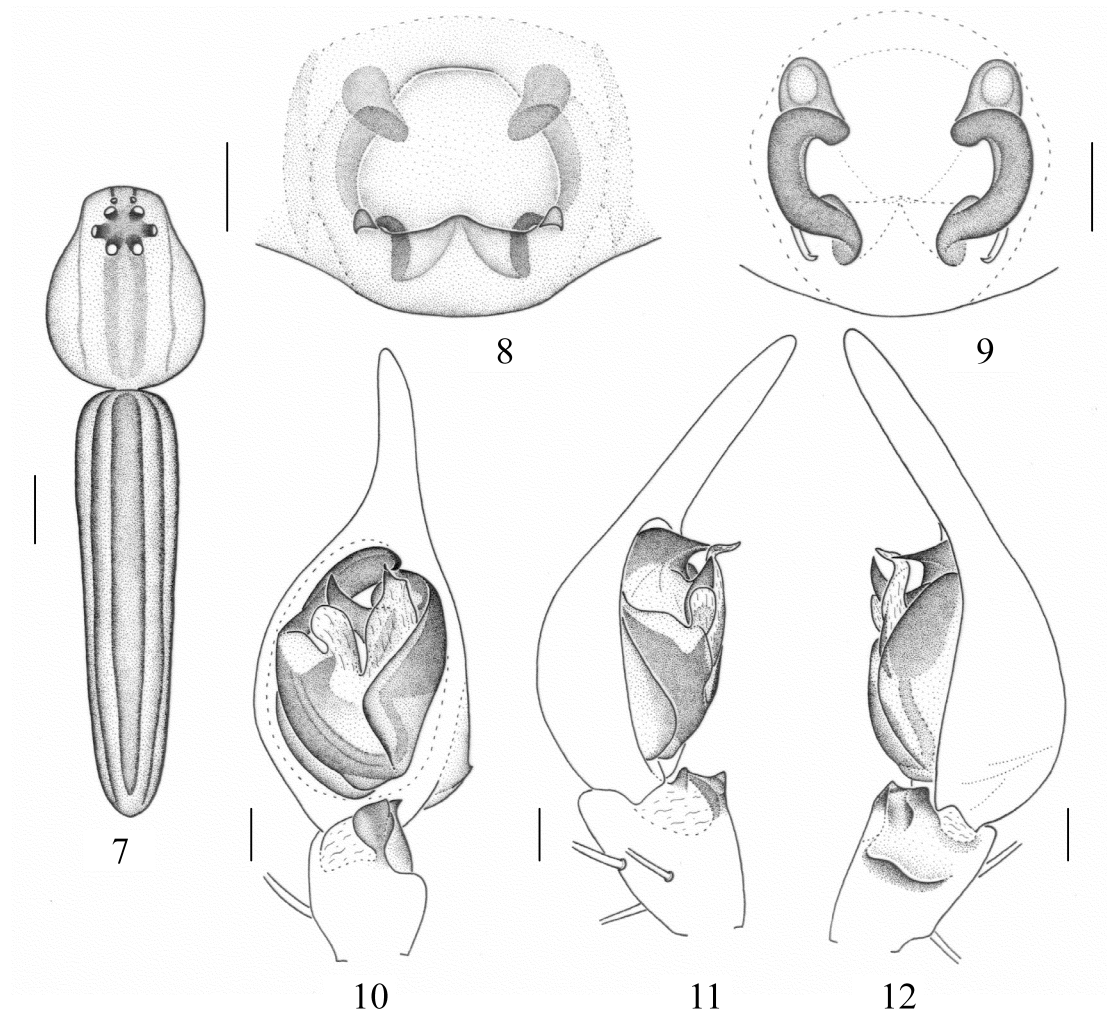
Figs. 7–12

Types. Female holotype (MHBV-Ar-91) and 1 male paratype (MHBV-Ar-92) from Jianfengling (18°44'N, 108°51'E), Ledong County, Hainan Province, China, 13 December, 2003, collected by M. S. Zhu and J. X. Zhang.

Etymology. The specific name is from the Latin *decorosus*, and refers to the vivid body color pattern.

Diagnosis. The new species is very similar to *Oxyopes macilentus* L. Koch, 1878 in the shape of male palpal organ (Song, 1991: 173, fig. 5), but can be distinguished from the latter by abdomen elongate; basal cymbinal process smaller, membranous tegular apophysis larger, basal apophysis of embolus dagger-like in lateral view, rather than almost rectangular in *O. macilentus*; median extension of female epigynum absent, and epigynum with a pair of small pockets on posterior part.

Female. Holotype. Body length 9.18; cephalothorax 3.15 long, 2.34 wide; abdomen 6.12 long, 1.49 wide. Carapace pyriform and yellow, with a pair of thin dark



Figs. 7–12. *Oxyopes decorosus* new species: 7–9, Female holotype, 10–12, male paratype. 7, female, dorsal view; 8, epigynum, ventral view; 9, female internal genitalia, dorsal view; 10, palpal organ, ventral view; 11, palpal organ, prolateral view; 12, palpal organ, retrolateral view. (Scales for Fig. 7, 1 mm; for Figs. 8–12, 0.2 mm)

longitudinal bands in front of AMEs which extending to the front face of chelicerae; thoracic part with a pair of mesal reddish longitudinal bands and a pair of lateral gray longitudinal bands. Chelicerae yellow, with two promarginal and one retromarginal teeth. Femur of palp with four dorsal spines. Endites and labium yellow. Sternum yellowish brown. Legs yellow, with a ventral longitudinal gray band on each femur and gray spots on other segments. Legs with many long spines. Tibiae with long and curved trichobothria, distal end of ventral tibiae lacking a pair of short spines. Abdomen elongate and white yellow; dorsum with a thin longitudinal dark band near the each lateral margin, center with a red orange longitudinal band and its lateral margins dark; venter with a pair of black longitudinal bands behind the genital groove. Eye sizes: AME 0.12, ALE 0.23, PME 0.21, PLE 0.18. AME-AME 0.20, AME-ALE 0.09, PME-PME 0.27, PME-PLE 0.27. First eye row 0.38 wide, second eye row 0.65 wide, third eye row 1.13 wide, fourth eye row 0.61 wide. MOA 0.91 long, front width 0.38, back

width 0.61. Clypeus height 0.53. Labium longer than wide (0.71 : 0.39). Sternum longer than wide (1.48 : 1.19). Measurements of legs: leg I 17.15 (4.77, 6.12, 4.59, 1.67), II 15.89 (4.41, 5.49, 4.50, 1.49), III 13.42 (4.05, 4.46, 3.74, 1.17), IV 15.95 (4.64, 5.18, 4.73, 1.40). Leg formula: 1423. Epigynum lacking median extension, with a large anterior depression and a pair of small pockets; copulatory duct relatively short, spermatheca oval.

Male. Body length 9.77; cephalothorax 3.29 long, 2.61 wide; abdomen 6.57 long, 1.53 wide. Chelicerae with one tooth on each of promargin and retromargin. Other characters similar to those of female. Measurements of palp and legs: palp 4.23 (1.41, 0.44, 0.58, 1.80); leg I 20.44 (5.27, 6.71, 6.03, 2.43), II 18.46 (4.73, 6.30, 5.58, 1.85), III 15.76 (4.46, 5.13, 4.77, 1.40), IV 18.77 (5.27, 5.85, 6.03, 1.62). Leg formula: 1423. Cymbium of palp with a basal process, distal end of median apophysis hooked, basal apophysis of embolus dagger-like.

Acknowledgements

We are grateful to Dr. A. Tanikawa for his valuable comments on the manuscript. This study was supported by grants from Hebei University to Miss J. X. Zhang (2003Q07).

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Received September 24, 2004 / Accepted October 18, 2004